

What is claimed is:

1. A method for allocating resources in a cellular network comprising:

monitoring said cellular network, said monitoring comprising:

continuously measuring approximate available bandwidth
within at least one shared media in said cellular network; and

continuously measuring the demand for bandwidth within
said at least one shared media, for at least two service classes;
and

automatically changing bandwidth allocations for each of said at least two
service classes in accordance with at least one value from said continuously
measured approximate available bandwidth and at least one value from said
continuously measured demand for bandwidth.

2. The method of claim 1, wherein said automatically changing bandwidth
allocations includes setting said bandwidth allocations.

3. The method of claim 2, wherein said setting bandwidth allocations includes:
creating sectors of guaranteed bandwidth.

4. The method of claim 3, wherein said setting bandwidth allocations includes:
creating supplements of non-guaranteed bandwidth for each of said
sectors created.

5. The method of claim 2, wherein said setting bandwidth allocations includes:
creating sectors of guaranteed bandwidth; and
creating supplements of non-guaranteed bandwidth for each of said
sectors created.

6. The method of claim 1, wherein said automatically changing bandwidth allocations includes tuning said bandwidth allocations.

7. An apparatus for allocating resources in at least one cellular network comprising:

a storage medium; and

a processor, said processor programmed to:

monitor said cellular network, said monitoring comprising:

continuously measuring approximate available bandwidth within at least one shared media in said cellular network; and

continuously measuring the demand for bandwidth within said at least one shared media, for at least two service classes; and

automatically change bandwidth allocations for each of said at least two service classes in accordance with at least one value from said continuously measured approximate available bandwidth and at least one value from said continuously measured demand for bandwidth.

8. The apparatus of claim 7, wherein said processor is additionally programmed to automatically change bandwidth allocations, including setting said bandwidth allocations.

9. The apparatus of claim 8, wherein said processor is additionally programmed to set said bandwidth allocations including:

creating sectors of guaranteed bandwidth.

10. The apparatus of claim 9, wherein said processor is additionally programmed to set said bandwidth allocations including:

creating supplements of non-guaranteed bandwidth for each of said sectors created.

11. The apparatus of claim 8, wherein said processor is additionally
5 programmed to set said bandwidth allocations including:

creating sectors of guaranteed bandwidth; and

creating supplements of non-guaranteed bandwidth for each of said sectors created.

10 12. The apparatus of claim 7, wherein processor is additionally programmed to automatically change bandwidth allocations, including tuning said bandwidth allocations.

13. A programmable storage device readable by a machine, tangibly embodying
15 a program of instructions executable by a machine to perform method steps for providing resource allocations in a cellular network, said method steps selectively executed during the time when said program of instructions is executed on said machine, comprising:

monitoring said cellular network, said monitoring comprising:

20 continuously measuring approximate available bandwidth within at least one shared media in said cellular network; and

continuously measuring the demand for bandwidth within said at least one shared media, for at least two service classes; and

25 automatically changing bandwidth allocations for each of said at least two service classes in accordance with at least one value from said continuously measured approximate available bandwidth and at least one value from said continuously measured demand for bandwidth.

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